

AMENDMENTS TO THE SPECIFICATION:

Please replace the title of the application, at the beginning of the first page of the specification, with the following title:

~~SUPPRESSOR OF HIV REPLICATION AND TRANSCRIPTION~~ METHODS FOR IDENTIFICATION OF CD8⁺ SUPPRESSOR MOLECULES

Please replace paragraph [0015] with the following amended paragraph:

[0015] The present invention further relates to the isolation and characterization of CD8⁺ cell clones that ~~produces produce~~ the antiviral activity, e.g., using one or more of the screening assays of the invention. The invention also relates to the generation of permanently established CD8⁺ cell lines that produce the antiviral activity. The antiviral activity produced by such cell lines may be produced by a soluble, cytolytic molecule produced by said cell lines or, alternatively, may be produced by a non-cytolytic molecule produced by said cell lines (e.g., a molecule expressed on the membrane of said cell lines). Such cell lines may be generated by transferring cellular or viral genes capable of transformation or immortalization into CD8⁺ cells. Exemplary cell lines which are considered part of the present invention include the cell lines described hereinbelow, which referred to as DU-JR.HVS and DU.HS-HVS and identified by the ATCC Accession Nos. ([#####]) PTA-1551 and ([#####]) PTA-1552, respectively

Please replace paragraph [0144] with the following amended paragraph:

[0144] ~~Peripheral~~ Peripheral blood mononuclear cells (PBMC) were prepared from freshly-drawn, anticoagulated venous blood ~~drawn~~ from asymptomatic HIV-positive individuals by standard Ficoll-Hypaque density separation. Cells were activated for 3 days with anti-CD3 (OKT3) and anti-CD28 antibodies in AIMV medium (Sigma) ~~Supplemented~~ supplemented with 10% FBS, recombinant interleukin 2 (rIL-2, 20 units per ml), streptomycin (50 µg/ml) and gentamicin (10 µg/ml) at 37° C[.] in a humidified CO₂ incubator. CD4⁺ cells were removed by positive selection with anti-CD4⁺ antibody coated beads (Dynal, Lake Success, N.Y.). CD8⁺ cells were further purified by positive selection with anti-CD8⁺ antibody coated beads (Dynal, Lake Success, N.Y.). Beads were removed by DetachaBead (Dynal).

Please replace paragraph [0152] with the following amended paragraph:

[0152] CD8⁺ T-lymphocytes from ten asymptomatic HIV-positive individuals were screened for inhibition of X4 HIV-1 virus replication. CD8⁺ T-cells from two subjects ~~which~~ exhibiting the most potent activity were subsequently transformed with Herpesvirus Herpesvirus saimiri (HVS) to develop cell lines with this effector phenotype according to the methods described by Lacey et al., 1998, *AIDS Res. Hum. Retroviruses* 14:521-531. These cell lines, which are referred to herein as DU.JR-HVS and DU.HS-HVS, were deposited with the American Type Culture Collection (ATCC; Manassas, Va.) on March [[#]] 14, 2000 as described in Section 11, below, and given the Accession Nos. [[#####]] PTA-1551 and [[#####]] PTA-1552, respectively.

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Response to Restriction Requirement dated Dec. 11, 2003
Reply to Office communication of Nov. 12, 2003

Please replace paragraph [0168] with the following amended paragraph:

[0168] The following microorganisms have been deposited with the American Type Culture Collection, (ATCC), 10801 University Boulevard, Manassa Manassas, Va. 20110-2209 on the dates indicated below and in compliance with the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purpose of Patent Procedure. The deposited microorganisms have been assigned the following accession numbers:

Microorganism	Date of Deposit	Accession No.
DU. HL-2	March 26, 1993	CRL 11310
DU. HL-4	March 26, 1993	CRL 11309
DU. WS-1-CD8(HVS)	June 5, 1995	CRL 11919
DU.JR-HVS	March 14, 2000	[[#### ####]] <u>PTA-1551</u>
DU.HS-HVS	March 14, 2000	[[#### ####]] <u>PTA-1552</u>

Please replace paragraph [0173] with the following amended paragraph:

[0173] The present invention provides a method for detecting a CD8+ CD8⁺ suppressor molecule that has anti-HIV activity, the method comprising contacting a host cell with a replication deficient HIV pseudotyped virus comprising a reporter gene operatively associated with an HIV promoter; contacting the host cell with a sample comprising enriched CD8+ CD8⁺ cells or a cell culture of CD8+ CD8⁺ cells; and measuring inhibition of reporter gene activity, wherein inhibition of reporter gene activity correlates with anti-HIV activity.

Please replace paragraph [0198] with the following amended paragraph:

[0198] The present invention also provides a permanently established lymphocyte cell line that expresses a CD8+ CD8⁺ protein on the cell surface and expresses a CD8+ CD8⁺ suppressor molecule that inhibits HIV replication, wherein said CD8+ CD8⁺ suppressor molecule is a non-cytolytic molecule. In one embodiment, the cell line is the cell line identified as DU.JR-HVS (ATCC Accession No. [[#####]] PTA-1551). In another embodiment, the cell line is the cell line identified as DU.HS-HVS (ATCC Accession No. [[#####]] PTA-1552).